

(19) World Intellectual Property
Organization
International Bureau

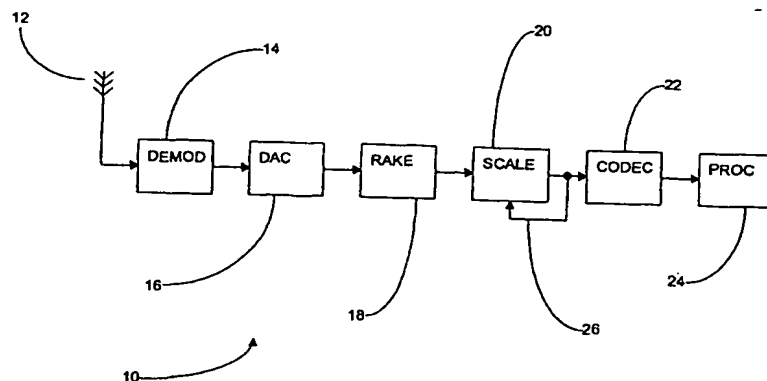


(43) International Publication Date
21 May 2004 (21.05.2004)

PCT

(10) International Publication Number
WO 2004/042934 A1

- (51) International Patent Classification?: H03M 13/41, 13/45, H04L 1/00, 25/06
- (21) International Application Number: PCT/GB2003/004755
- (22) International Filing Date: 5 November 2003 (05.11.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 0226003.2 7 November 2002 (07.11.2002) GB
- (71) Applicant (for all designated States except US): TTP-COM LIMITED [GB/GB]; Melbourn Science Park, Cambridge Road, Melbourn, Royston, Hertfordshire SG8 6EE (GB).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): WASILEWSKI, Bartosz, Krzysztof [PL/GB]; 18 Tabbs Close, Letchworth Garden City, Hertfordshire SG6 1DW (GB).
- (54) Title: STATISTICAL SCALING OF SOFT DECISIONS BEFORE DECODING
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



(57) **Abstract:** A wireless-communications unit has a receiver chain including a codec decoding the output of a rake receiver. Soft decisions passing from the rake receiver to the codec are scaled. The scaling factor can be tuned by monitoring a function based on the cumulative probability distribution function of the scaled soft decisions.